Listing of the Claims:

This Listing of the Claims replaces all other versions and listings of the claims in the application.

1. (Previously presented) A catalytic antagonist of a target molecule, said antagonist comprising a targeting moiety that specifically binds to said target molecule said targeting moiety being a carbohydrate attached to an enzyme, said enzyme being a subtilisin-type serine protease that degrades said target molecule to reduce binding of the target molecule to its cognate ligand and to said targeting moiety thereby resulting in the release of said antagonist thereby allowing said antagonist to bind and degrade another target molecule.

2. (Original) The antagonist of claim 1, wherein said targeting moiety is joined to said enzyme through the sulfur group on a cysteine.

3. (Original) The antagonist of claim 2, wherein said cysteine is a cysteine that is substituted for a native amino acid other than cysteine in said enzyme.

4. (Currently amended) The antagonist of claim 3, wherein said cysteine is a cysteine that is substituted for a native amino acid other than cysteine in ~~or near~~ a subsite comprising a substrate binding site of said enzyme, or in an amino acid position adjacent to the subsite or in van der Waals contact with the subsite.

5. (Original) The antagonist of claim 4, wherein said cysteine is a cysteine that is substituted for an amino acid forming a substrate binding site.

6. (Canceled)

7. (Currently amended) The antagonist of claim 5, wherein ~~said cysteine is substituted for an amino acid in or near a~~ the subsite is selected from the group consisting of an S1 subsite, an S1' subsite, and an S2 subsite.

8. (Currently amended) The antagonist of claim 7, wherein said enzyme is a *Bacillus lentus* subtilisin ~~(Protein Accession Number P29600)~~.

9. (Currently amended) The antagonist of claim 7, wherein said cysteine is substituted for an amino acid corresponding to a reference residue in a *Bacillus lentus* subtilisin ~~(SBL; Protein Accession Number P29600)~~, where said reference residue is at or near a residue selected from the group consisting of residue 156, residue 166, residue 217, residue 222, residue 62, residue 96, residue 104, residue 107, residue 189, and residue 209.

10–18. (Canceled)

19. (Previously presented) The antagonist of claim 1, wherein said target molecule is a molecule present on the surface of a cell.

20. (Previously presented) The antagonist of claim 19, wherein said molecule present on the surface of a cell is a molecule forming a receptor.

21. (Previously presented) The antagonist of claim 19, wherein said molecule present on the surface of a cell is a ligand.

22. (Previously presented) The antagonist of claim 19, wherein said molecule present on the surface of a cell is a component of a cell wall.

23. (Previously presented) The antagonist of claim 19, wherein said molecule present on the surface of a cell is a component of a cell membrane.

24. (Canceled)

25. (Previously presented) The antagonist of claim 1, wherein said targeting moiety is a cognate ligand for a receptor or an enzyme.

26. (Previously presented) The antagonist of claim 1, wherein said targeting moiety is an inhibitor for a receptor or an enzyme.

27-31. (Canceled)

32. (Previously presented) The antagonist of claim 1, wherein said targeting moiety is a ligand that binds a lectin.

33. (Currently amended) The antagonist of claim ~~1~~33, wherein said lectin is concanavalin A.

34. (Previously presented) The antagonist of claim 1, wherein said targeting moiety is a carbohydrate.

35. (Previously presented) The antagonist of claim 1, wherein said targeting moiety is thioethyl D-mannopyranoside.

36. (Previously presented) The antagonist of claim 1, wherein said targeting moiety specifically binds to a soil and said enzyme degrades a component of said soil.

37. (Withdrawn) A method of degrading a target molecule, said method comprising contacting said target molecule with a catalytic antagonist comprising a targeting moiety that specifically binds to said target molecule said targeting moiety being a carbohydrate attached to an enzyme, said enzyme being a subtilisin-type serine protease that degrades said target molecule resulting in the release of said antagonist thereby allowing said antagonist to bind and degrade another target molecule.

38. (Withdrawn) The method of claim 37, wherein said targeting moiety is joined to said enzyme through the sulfur group on a cysteine.

39. (Withdrawn) The method of claim 38, wherein said cysteine is a cysteine that is substituted for a native amino acid other than cysteine in said enzyme.

40. (Withdrawn) The method of claim 39, wherein said cysteine is a cysteine that is substituted for a native amino acid other than cysteine in or near a subsite comprising a substrate binding site of said enzyme.

41-43. (Canceled)

44. (Withdrawn) The method of claim 39, wherein said cysteine is a cysteine that is substituted for an amino acid forming a substrate binding site.

45. (Withdrawn) The method of claim 44, wherein said cysteine is substituted for an amino acid in or near a subsite selected from the group consisting of an S1 subsite, an S1' subsite, and an S2 subsite.

46. (Withdrawn) The method of claim 45, wherein said enzyme is a *Bacillus lentus* subtilisin.

47. (Withdrawn) The method of claim 45, wherein said cysteine is substituted for an amino acid corresponding to a reference residue in a *Bacillus lentus* subtilisins (Protein Accession Number P29600), where said reference residue is at or near a residue selected from the group consisting of residue 156, residue 166, residue 217, residue 222, residue 62, residue 96, residue 104, residue 107, residue 189, and residue 209.

48-55. (Canceled)

56. (Withdrawn) The method of claim 37, wherein said target is a molecule present on the surface of a cell.

57. (Withdrawn) The method of claim 56, wherein said molecule present on the surface of a cell is a molecule forming a receptor.

58. (Withdrawn) The method of claim 56, wherein said molecule present on the surface of a cell is a ligand.

59. (Withdrawn) The method of claim 56, wherein said molecule present on the surface of a cell is a component of a cell wall.

60. (Withdrawn) The method of claim 56, wherein said molecule present on the surface of a cell is a component of a cell membrane.

61. (Canceled)

62. (Withdrawn) The method of claim 1, wherein said targeting moiety is a cognate ligand for a receptor or an enzyme.

63. (Withdrawn) The method of claim 1, wherein said targeting moiety is an inhibitor for a receptor or an enzyme.

64-68. (Canceled)

69. (Withdrawn) The method of claim 37, wherein said targeting moiety is a ligand that binds a lectin.

70. (Withdrawn) The method of claim 37, wherein said lectin is concanavalin A.

71. (Canceled)

72. (Withdrawn) The method of claim 37, wherein said targeting moiety is thioethyl D-mannopyranoside.

73. (Withdrawn) The method of claim 37, wherein said targeting moiety specifically binds to a soil and said enzyme degrades a component of said soil.

74-145. (Canceled)